



# Cornell Cooperative Extension

## Cornell Garden-Based Learning

### 2018 IPM Project Report

**1. Title:** A Low-Literacy Needs Assessment & Guidelines for Best Practices: How Do We Best Reach This Audience?

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**4. Abstract:**

As Cornell Garden-Based Learning increasingly creates opportunities for low income audiences, it is evident that low-literacy is an unmet pressing issue, often concealed since participants are skilled at hiding their inability to read; they are rarely considered as we strive to address the compelling concerns of our times. Detrimental impacts range from misuse of horticultural products to becoming further entrenched in patterns of poverty. To engage all participants and ensure that no one is excluded from vital information about our rapidly changing world, we performed a needs assessment to determine the ideal manner to prepare educational materials that support the adoption of IPM practices for this under-represented audience. The needs assessment later informed the development of Guidelines for Best Practices.

**5. Background and Justification:**

According to The New England Journal of Medicine (Marcus, 2006), 12 percent of U.S. adults are estimated to have below basic “document literacy,” meaning they lack the ability to read and understand documents and labels. Low-literacy audiences face many overwhelming challenges: poverty, unemployment, food insecurity, and the deep shame that undergirds these issues. It is difficult for this demographic to find accessible resources, including horticulture and IPM education. As our program increasingly meets the needs of low-income gardeners, we are

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learning that this marginalized community lacks even the most basic resources to properly participate in food gardening projects. Furthermore, without being able to read and understand documents, labels, directions and the basics of ecological gardening, it is highly likely they carry out improper horticultural product practices which could be detrimental to our environment – and to themselves and their families.

Our project focused on understanding the best formats for developing innovative educational materials for Community IPM to be delivered to low-literacy audiences (#6 on the list of 2018 Priorities). We understand that there is a gap in educational materials and resources that serve low-literacy audiences in NYS. The project focused on learning the ideal way in which materials should be prepared, as well as the ways in which this audience's unique needs are best served. We also focused on discovering the other nuances that are necessary to ensuring that once developed, the materials would be used. To our knowledge, no similar curriculum exists.

The range of audiences served by the project is very broad. Our findings will benefit those who engage ESL audiences as well as those who work with children or youth (aligning with the first priority listed on the Northeast School IPM Priorities list), and elder gardeners challenged by small fonts and excessive verbiage. This project aligns with several of the Urban IPM Priorities, including “Define target audiences among “the general public” and shape urban IPM messaging to those audiences.”

Before delving deeply into the development of materials for low-literacy audiences, we performed a thorough needs assessment to first determine the most significant deficits in educational resources for this population and the ways in which other disciplines have addressed these needs in effective ways. Community IPM Grant funding allowed us to tackle Phase One: a comprehensive needs assessment and guidelines on best practices.

## **6. Objectives:**

1. Develop an embedded assessment evaluation plan with formative evaluation methods at key junctures.
2. Perform a low-literacy audience needs assessment in NYS communities to determine the most significant needs with horticulture and Community IPM food gardening materials.
3. Survey key stakeholders to learn best practices of engaging this priority audience and best practices of educational material design.
4. Research state and nation-wide resources to determine if materials of this nature already exist. Archive relevant resources that could contribute to the development of highly visual materials.
5. Learn about the ways in which other program partners beyond our discipline have effectively prepared materials for this audience, and how they have reached participants with those materials.
6. Complete project evaluation.

## **7. Procedures:**

1. Create interview guide and surveys.
2. Interview CCE staff in key regions throughout the state to learn about their engagement of low-literacy individuals in their communities. With the assistance of engaged CCE educators directly involved with this audience, identify an intentional plan to gather input from low-literacy individuals, focusing particularly on engaging them without causing feelings of shame or inadequacy. Systematically implement information gathering.
3. Collaborate with campus-based individuals who have expertise in engaging marginalized

audiences and developing educational material design. Schedule one-on-one meetings to seek input.

4. Reach out to key people throughout the country, those affiliated with other Land Grant Universities along with nonprofits doing similar work. Perform intensive web searches to see what similar curriculum materials exist.

5. As a part of the above, key informants will be surveyed to discover the ways in which they ensure that project materials are actually used by participants.

6. Project Evaluation, which happens at key points along the way above, and will be summarized at project's end:

- Gather evaluative feedback from the target audience after each touch-point. Focus on elements of engagement with marginalized communities.
- Survey key informants to learn more about resource development and distribution.
- Schedule a half-day retreat to honestly reflect and assess the Phase One process: Were we able to connect with the target audience? What does their input tell us? What new tactics or approach might we take as we go forward?

7. Share findings and stimulate discussion around this topic at the 2019 CCE Systems Conference. Submit *Guidelines for Best Practices* to the *Journal of Extension* so that educators nation-wide can utilize our findings.

## **8. Results and discussion:**

As a result of this project we have produced a set of *Guidelines for Best Practices* for engaging this priority audience, including educational material design for IPM related topics and a library of existing materials. The guidelines will be circulated to both NYS and national educators, benefiting both the public and private sector. We plan to stimulate conversation around the topic of low-literacy and brainstorm potential next steps.

Moreover, we have connected with new audiences within our NYS population, expanding the reach of NYS IPM and Cornell Garden-Based Learning. We have gained a better understanding of the new audiences' needs in food gardening IPM materials. We have also strengthened key partnerships with campus and county-based Cornell colleagues along with members of the NYS community. We will share findings with others in the Extension system and our national partners.

This project has shown us that the topic of low-literacy is much larger and complex than we anticipated. Our work is just the beginning of understanding the needs of low-literacy communities. Upon reflection, we find ourselves asking, what comes next and how can we bring this project further? We hope to find answers to our questions through stakeholder discussions and will likely seek funding for Phase Two in the near future.

The long-term impacts of our work will lead to more intentional use of horticultural products by home gardeners, community gardeners and school communities. Although the target audience of the project is low-literacy audiences, schools, non-English speaking community members and elders will benefit from our findings.

## **9. Project location(s):**

Our work reached far into the communities of NYS and beyond. We hosted four focus groups, one each in Erie, Rockland, Suffolk and Tompkins county. We connected with campus-and-county-based stakeholders as well as those doing similar work across the country such as in Oregon and Ohio. We plan to publish our findings in the Journal of Extension (JOE) and in the

Cornell Cooperative Extension Insider.

**10. Samples of resources developed:**

As part of the project, we have archived relevant resources that could contribute to the development of materials and we have developed *Guidelines for Best Practices*. As of this writing, both are still in draft form and will be finalized after the final focus group on 1/18/19. While we are glad to share the draft at any point you wish, currently we plan to send along the Guidelines and library materials, with a “read me first” doc that walks you through those, via a Cornell Box link at the end of February when our funding formally concludes.